

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An improved ultrasonic cleaner assembly for irradiated nuclear fuel assemblies, comprising:

a housing assembly for receiving a fuel assembly, wherein the housing assembly contains a fluid therein;

a filter and pump assembly for withdrawing and filtering the fluid from the housing assembly at predetermined times; and

a flow diverter assembly operatively connected to the housing assembly for switching a flow path between a fuel pool and a suction line to the a filter and pump assembly, wherein the flow diverter assembly establishes a flow path with a fuel pool when in a by-pass position, and wherein the flow diverter assembly establishes a flow path with the suction line to the filter and pump assembly when in an engaged position.

2. (Original) The ultrasonic cleaner assembly according to claim 1, wherein the flow diverter assembly comprises:

a fixed outer member;

a spring biased movable member, wherein the movable member is movable within the fixed outer member between the by-pass position and the engaged position.

3. (Original) The ultrasonic cleaner assembly according to claim 2, wherein the spring biased movable member moves from the by-pass position to the engaged position in response to a force applied by the fuel assembly.

4. (Cancelled).

5. (Currently Amended) An improved ultrasonic cleaner assembly comprising:

a first housing assembly for receiving a first fuel assembly, wherein the first housing assembly contains a fluid;

~~a first flow diverter assembly operatively connected to the first housing assembly for switching a flow path between a fuel pool when in a by pass position and a suction line to a~~

~~filter and pump assembly when in an engaged position;~~

a second housing assembly for receiving a second fuel assembly, wherein the second housing assembly contains the fluid;

a filter and pump assembly for withdrawing and filtering the fluid from at least one of the first housing assembly and the second housing assembly at predetermined times;

a first flow diverter assembly operatively connected to the first housing assembly for switching a flow path between a fuel pool when in a by-pass position and a suction line to the filter and pump assembly when in an engaged position; and

a second flow diverter assembly operatively connected to the second housing assembly for switching a flow path between the fuel pool when in a by-pass position and the suction line to the filter and pump assembly when in an engaged position.

6. (Original) The ultrasonic cleaner assembly according to claim 5, wherein each flow diverter assembly comprises:

a fixed outer member;

a spring biased movable member, wherein the movable member is movable within the associated fixed outer member between the by-pass position and the engaged position.

7. (Original) The ultrasonic cleaner assembly according to claim 6, wherein each spring biased movable member moves from the by-pass position to the engaged position in response to a force applied by the corresponding fuel assembly.

8. (Cancelled).

9. (Original) The ultrasonic cleaner assembly according to claim 5, wherein both flow diverters open slightly to allow some bypass flow when both housing assemblies are empty.

10. (Original) The ultrasonic cleaner assembly according to claim 6, wherein both flow diverters open slightly to allow some bypass flow when both housing assemblies are empty.

11. (Original) The ultrasonic cleaner assembly according to claim 7, wherein both flow diverters open slightly to allow some bypass flow when both housing assemblies are empty.

12. (Currently Amended) The ultrasonic cleaner assembly according to claim ~~12~~ 8, wherein both flow diverters open slightly to allow some bypass flow when both housing assemblies are empty.

13. (Currently Amended) A flow diverter assembly comprising:
a fixed outer member, wherein the fixed outer member having at least one by-pass position window formed therein and at least one engaged position window formed therein;
a spring biased movable member having at least one window formed therein, wherein the movable member is movable within the fixed outer member between a by-pass position and an engaged position, wherein the movable member moves between the by-pass position to the engaged position in response to application of a load on the movable member, wherein the at least one window is aligned with the at least one by-pass position window when the movable member is in the by-pass position and the at least one window is aligned with the at least one engaged position when the movable member is in the engaged position.

14. (Original) The flow diverter assembly according to claim 13, wherein the spring biased movable member moves from the by-pass position to the engaged position in response to locating an object on the movable member.

15. (Cancelled).

16. (New) The ultrasonic cleaner assembly according to claim 2, wherein the fixed outer member having at least one by-pass position window formed therein and at least one engaged position window formed therein,

wherein the spring biased movable member having at least one window formed therein, and

wherein the at least one window is aligned with the at least one by-pass position window when the movable member is in the by-pass position and the at least one window is

aligned with the at least one engaged position window when the movable member is in the engaged position.

17. (New) The ultrasonic cleaner assembly according to claim 1, wherein the flow diverter assembly is positioned within the housing assembly.

18. (New) The ultrasonic cleaner assembly according to claim 6, wherein the fixed outer member having at least one by-pass position window formed therein and at least one engaged position window formed therein,

wherein the spring biased movable member having at least one window formed therein, and

wherein the at least one window is aligned with the at least one by-pass position window when the movable member is in the by-pass position and the at least one window is aligned with the at least one engaged position window when the movable member is in the engaged position.

19. (New) The ultrasonic cleaner assembly according to claim 18, wherein the first flow diverter assembly is positioned within the first housing assembly and the second flow diverter assembly is positioned within the second housing assembly.